20

25

5

## What is claimed is:

- 1. A circuit comprising: an amplifier producing a DC-offset and noise having an input for receiving an input signal from an input of the circuit, and an output for delivering an output signal to an output of the circuit; means for reducing the DC-offset and the noise produced by the amplifier; and feedback means for further reducing the DC-offset produced by the amplifier.
- 2. A circuit as claimed in claim 1, wherein the means for reducing the DC-offset and the noise produced by the amplifier comprises an input chopper arranged in cascade in between the input of the circuit and the input of the amplifier, and an output chopper synchronized with the input chopper, which output chopper is arranged in cascade in between the output of the amplifier and the output of the circuit.
- 15 3. A circuit as claimed in claim 2, wherein the input chopper and the output chopper are operative as high frequency choppers.
  - 4. A circuit as claimed in claim 1, wherein the further feedback means for further reducing the DC-offset produced by the amplifier comprises switching means for short-circuiting the input signal under control of a start-up signal; and means for adding back a sampled output signal to the amplifier for adapting the DC-offset of the amplifier.
  - 5. A circuit as claimed in claim 4, wherein the means for adding back the sampled output signal to the amplifier comprises an analog to digital converter with an input coupled to the output of the circuit, and with an output; a digital processing circuit with an input coupled to the output of the analog to digital converter, and an output; and a digital to analog converter with an input coupled to the output of the digital processing circuit, and an output coupled to the amplifier for adapting the DC-offset of the amplifier.
- 30 6. A circuit as claimed in claim 1, further including switching means, responsive to the feedback means, for short-circuiting the input signal under control of a start-up signal;

and means for adding back a sampled output signal to the amplifier for adapting the DC-offset of the amplifier.

7. A circuit as claimed in claim 6, wherein the means for adding back the sampled output signal includes an analog to digital converter with an input coupled to the output of the circuit, and with an output; a digital processing circuit with an input coupled to the output of the analog to digital converter, and an output; and a digital to analog converter with an input coupled to output of the digital processing circuit, and an output coupled to the amplifier for adapting the DC-offset of the amplifier.

10

5

8. A circuit comprising: means for amplifying an input signal and producing a DC-offset and noise and for delivering an output signal to an output of the circuit; means, responsive to the amplifier means, for reducing the DC-offset and the noise produced by the amplifier; and feedback means for further reducing the DC-offset produced by the amplifier.

15

9. A circuit comprising: an amplifier adapted to amplify an input signal and produce a DC-offset and noise and to deliver an output signal to an output of the circuit; a circuit adapted to respond to the amplifier by reducing the DC-offset and the noise produced by the amplifier; and a feedback circuit adapted to further reduce the DC-offset produced by the amplifier.

25

20

- 10. A circuit as claimed in claim 9, wherein the circuit adapted to respond to the amplifier by reducing the DC-offset and the noise includes an input chopper arranged in cascade in between the input of the circuit and the amplifier, and an output chopper synchronized with the input chopper, which output chopper is arranged in cascade in between the amplifier and the output of the circuit.
- 11. A circuit as claimed in claim 10, wherein the input chopper and the output chopper are operative as high frequency choppers.

5

10

15

- 12. A circuit as claimed in claim 9, wherein the feedback circuit includes a switch circuit adapted to short-circuit the input signal under control of a start-up signal; and an adder circuit adapted to add back a sampled output signal to the amplifier and for adapting the DC-offset of the amplifier.
- 13. A circuit as claimed in claim 12, wherein the adder circuit includes an analog to digital converter with an input coupled to the output of the circuit, and with an output; a digital processing circuit with an input coupled to the output of the analog to digital converter, and an output; and a digital to analog converter with an input coupled to the output of the digital processing circuit, and an output coupled to the amplifier for adapting the DC-offset of the amplifier.
- 14. A circuit as claimed in claim 13, wherein the feedback circuit includes a switch circuit adapted to short-circuit the input signal under control of a start-up signal; and an adder circuit adapted to add back a sampled output signal to the amplifier and for adapting the DC-offset of the amplifier.